SURFACE WATER SAMPLING FOR SANITARY SEWER OVERFLOWS

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Wastewater Operators Workshop | June 26, 2024

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Presentation Agenda

- Map Direct Tool:
  - How to access.
- Waterbody Classes:
  - Class Types.
  - Sample parameters.
- Sanitary Sewer Overflow Response Plan:
  - Sampling purpose.

HOW TO USE MAP DIRECT

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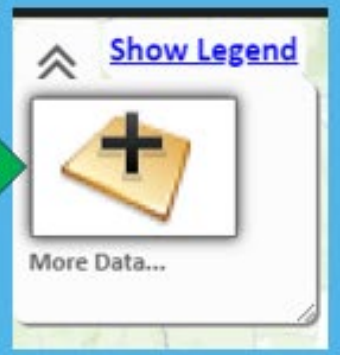
Visit this link to access Map Direct.

https://ca.dep.state.fl.us/mapdirect/

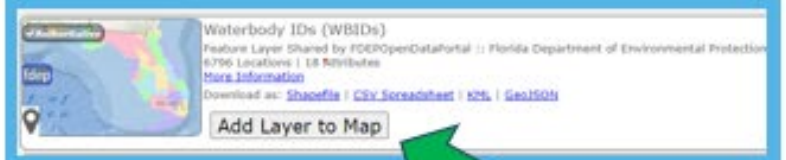
Left click to open to Map view.

On the left side of the map left click on the double arrows.

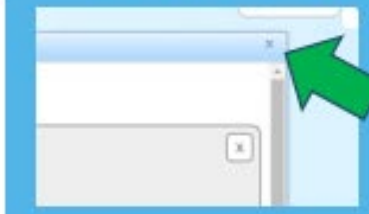
Left click the + to add more data layers.



Left click search bar and type "Waterbody ID" then Left click on the "Waterbody IDs (WBIDs)."



Left click "Add Layer to Map."



Left click the top right blue X.

Top right click on search bar to then enter the address of the waterbody location.

WATERBODY CLASS TYPES OVERVIEW

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Class Types: Rule 62-302.400(1), Florida Administrative Code (F.A.C.):

- Class I: Potable Water Supplies.
- Class I – Treated: Treated Potable Water Supplies.
- Class II: Shellfish Propagation or Harvesting.
- Class III: Fish Consumption and Maintenance.
- Class III – Limited: Limited Recreation.
- Class IV: Agricultural Water Supplies.
- Class V: Navigation, Utility and Industrial Use.

Parameters: Rule 62-302, F.A.C., lists 71 parameters, there are three parameters that are typically sampled for following a sanitary sewer overflow:

- Fecal Coliforms.
- *Escherichia coli* (E. coli).
- *Enterococci* (Entero).

Units: The parameters above are typically reported in Most Probable Number per 100 mL.

WATERBODY CLASS I AND CLASS I – TREATED

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62-302.400 F.A.C. definition of a Class I:

- A body of water used as a potable water supplies.

62-302.400 F.A.C. definition of a Class I – Treated:

- A treated body of water used as a potable water supplies.

Class I Example:

- Horse Creek – From the northern border of Section 14, Township 38 South, Range 23 East and southward to Peace River.

Class I – Treated Example:

- Peace River Segment – From the confluence with Horse Creek southward to the southern line of Section 15, Township 39 South and Range 23 East.

Minimum Sampling Parameters:

- *Escherichia coli* (E. coli).

WATERBODY CLASS II

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62-302.400 F.A.C. definition of a Class II:

- A body of water used for shellfish propagation or harvesting.

Class II – Treated Example:

- From the opening of the Matlacha Pass to meeting with the San Carlos Bay within Charlotte Bay in between Pine Island and Cape Coral.

Minimum Sampling Parameters:

- *Fecal Coliforms.*
- *Enterococci (Entero).*

WATERBODY CLASS III AND CLASS III - LIMITED

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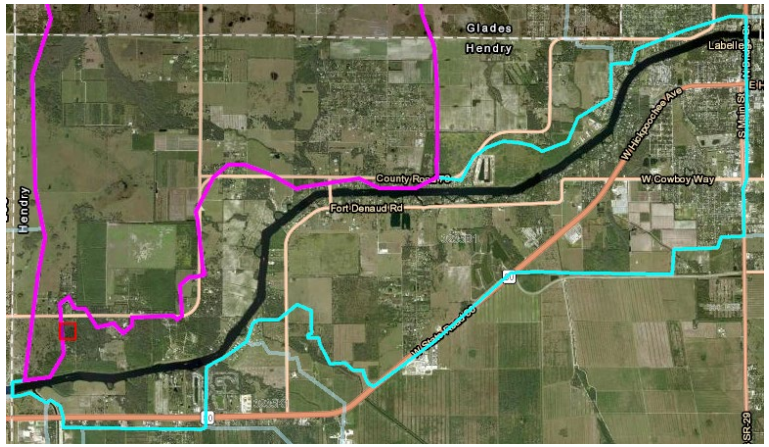
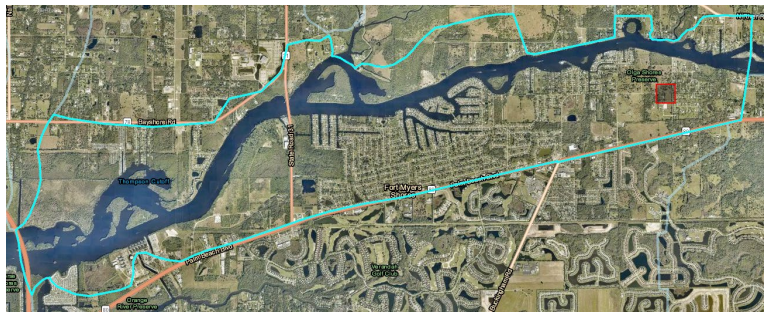
Fresh



Marine



Why only test for *Enterococci (Entero)* and not *E. coli* in salt water?

- *E. coli* dies in salt water.

62-302.400 F.A.C. definition of a Class III:

- A body of water used for fish consumption, recreation, propagation and maintenance of a healthy, well-balanced population of fish and wildlife.

62-302.400 F.A.C. definition of a Class III - Limited:

- A body of water used for fish consumption, recreation or limited recreation; and/or propagation and maintenance of a limited population of fish and wildlife.

Class III – Limited Example:

- Parts of the Caloosahatchee River between W.P. Franklin Lock and Dam to the Lee and Hendry boundary line.

Minimum Sampling Parameters:

- Predominantly fresh water - *Escherichia a coli (E. coli).*
- Predominantly salt water - *Enterococci (Entero).*

Predominantly Fresh Waters and Predominantly Marine Waters.

WATERBODY CLASS IV AND CLASS V

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62-302.400 F.A.C. definition of a Class IV:

- A body of water used for agricultural water supplies.

62-302.400 F.A.C. definition of a Class V:

- A body of water used for navigation, utility and industrial use.

Class IV and V Example:

- Class IV - Generally located in areas around Lake Okeechobee.
- Class V - There are currently not any designed Class V bodies of water in the state.

Minimum Sampling Parameters for both Class IV:

- If you spill in a Class IV waterbody, you may sample at your discretion, provided it is documented in your Sanitary Sewer Overflow Response Plan (SSORP)/Emergency Response Plan (ERP). The discussed minimum bacteriological parameters in this presentation are not relevant to Rule 62-302, F.A.C., but to spill in those waters may be considered an illicit discharge.

SSORP AND SAMPLING

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Operations and Maintenance:

- A facility should prepare themselves by having a plan for sanitary sewer overflows that reach surface waters.
  - Surface water sampling questions to ask:
    - Do you have a plan to sample impacted surface water?
    - What is you sampling frequency?
    - Did you sample upstream and downstream and point of discharge?
    - Is the lab you use available on nights, weekends and holidays?
    - Are you able to preserve the sample in case of an emergency?
    - Do you have a public notice of pollution template to fill out afterwards?

❖ SSORP are also known as an ERP.

Example for why to sample:

- To determine if the environmental harm is a direct result of the spill that has occurred.
- To verify that the water quality is at or below the background sample or water quality limit.

Florida Statue 403.121(4)(d) states:

- DEP may impose fines should the facility fail to properly implement its SSORP/ERP.

THANK YOU

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